

REMARKS

INTRODUCTION:

In accordance with the foregoing, claims 1, 5, 6, 10, 11, 15, 16, and 20-22 have been amended. Claims 1-23 are pending and under consideration.

ENTRY OF AMENDMENT UNDER 37 C.F.R. §1.116:

The Applicant requests entry of this Rule 116 Response because:

it is believed that the amendment of claims 1, 5, 6, 10, 11, 15, 16, and 20-22 puts this application into condition for allowance; the amendment of claims 1, 5, 6, 10, 11, 15, 16, and 20-22 should not entail any further search by the Examiner since no new features are being added; and the amendments do not significantly alter the scope of the claims and place the application at least into a better form for purposes of appeal. No new features or new issues are being raised. No new matter is being added.

The Manual of Patent Examining Procedures sets forth in Section 714.12 that "any amendment that would place the case either in condition for allowance or in better form for appeal may be entered." Moreover, Section 714.13 sets forth that "the Proposed Amendment should be given sufficient consideration to determine whether the claims are in condition for allowance and/or whether the issues on appeal are simplified." The Manual of Patent Examining Procedures further articulates that the reason for any non-entry should be explained expressly in the Advisory Action.

REJECTION UNDER 35 U.S.C. §102:

In the Office Action, at page 2, item 2, the Examiner rejected claims 1-23 under 35 U.S.C. §102(e) as being anticipated by Takashima (U.S. Patent No. 6,787,941). The reasons for the rejection are set forth in the Office Action and therefore not repeated. Applicants traverse this rejection and respectfully request reconsideration.

Amended independent claim 1 recites, "...a set of magnets arranged to be separated a predetermined distance from the coil, wherein an area between the magnets is an effective portion and an area outside of the magnets is a non-effective portion and, the coil is coupled to the rear end portion of the arm by an outer mold formed to encompass an outer circumference of the coil, an inner mold is formed inside the coil, and a connection mold connecting the outer

mold and the inner mold is formed on at least part of a surface of the non-effective portion of the coil and not on the effective portion .”

Amended independent claim 5 recites, “...a set of magnets arranged to be separated a predetermined distance from the coil, wherein an area between the magnets is an effective portion and an area outside of the magnets is a non-effective portion, the coil is coupled to the rear end portion of the arm by an outer mold formed to encompass an outer circumference of the coil, an inner mold is formed inside the coil, and a connection mold connecting the outer mold and the inner mold is formed at least part of a surface of the non-effective portion of the coil and not on the effective portion and, the connection mold is formed on an upper surface and a lower surface of the non-effective portion of the coil.”

Amended independent claim 6 recites “...a set of magnets arranged to be separated a predetermined distance from the coil, wherein an area between the magnets is an effective portion and an area outside of the magnets is a non-effective portion and, the coil is coupled to the rear end portion of the arm by an outer mold formed to encompass an outer circumference of the coil, an inner mold is formed inside the coil, and a connection mold connecting the outer mold and the inner mold is formed on at least part of a surface of the non-effective portion of the coil and not on the effective portion.”

Amended independent claim 10 recites “...a set of magnets arranged to be separated a predetermined distance from the coil, wherein an area between the magnets is an effective portion and an area outside of the magnets is a non-effective portion, the coil is coupled to the rear end portion of the arm by an outer mold formed to encompass an outer circumference of the coil, an inner mold is formed inside the coil, and a connection mold connecting the outer mold and the inner mold is formed on at least part of a surface of the non-effective portion of the coil and not on the effective portion and, the connection mold is formed on an upper surface and a lower surface of the non-effective portion of the coil.”

Amended independent claim 11 recites “...magnets positioned above and below a part of an effective portion of a coil during operation of the suspended actuator, wherein the coil, including the effective portion and a non-effective portion outside of the effective portion of the magnets, carrying current in two directions and coupled to the pivoting arm by an outer mold encompassing an outer circumference of the coil, an inner mold inside the coil, and a connection mold, connecting the outer and inner molds, at a surface of the non-effective portion and not at a surface of the effective portion. “

Amended independent claim 15 recites “...magnets normally above and below a part of an effective portion of a coil during operation of the suspended actuator, wherein the coil,

including the effective portion running perpendicular to a pivoting direction and a non-effective portion running parallel to the pivoting direction, carrying current in two directions and coupled to the pivoting arm by an outer mold encompassing an outer circumference of the coil, an inner mold inside the coil, and a connection mold, connecting the outer and inner molds, at a surface of the non-effective portion and not at a surface of the effective portion.”

Amended independent claim 20 recites “...magnets normally above and below a part of an effective portion of the coil during operation of the suspended actuator, wherein the coil, including the effective portion and a non-effective portion outside of the area of the effective portion and coupled to the pivoting arm by an outer mold encompassing an outer circumference of the coil, an inner mold inside the coil, and a connection mold, connecting the outer and inner molds, at a surface of the non-effective portion and not at a surface of the effective portion.”

Amended independent claim 21 recites “...a set of magnets arranged to be separated a predetermined distance from the coil, wherein an area between the magnets is an effective portion and an area outside of the magnets is a non-effective portion; and an inner mold is formed inside said coil; an outer mold is formed on an outer circumference of said coil; and a connection mold connecting said outer mold and said inner mold wherein the connection mold is formed both on said upper and said lower surface of the non-effective portion of the coil and not on the effective portion.”

On pages 2 and 3, the Examiner asserts that Takashima shows a connection mold connecting the outer mold and the inner mold, is formed on at least part of a surface of a non-effective portion of the coil except for an effective portion arranged to be perpendicular to a direction in which the arm pivots. In the present invention, the effective portion is the area between the magnets. The non-effective area is an area other than the effective area. When the connection mold is formed only on the surface of the non-effective portion and not on the effective portion of the coil as in the present invention, it may be possible to decrease the distance between the magnets and proportionally increase the torque that pivots the arm.

Takashima shows a pair of magnets 15 secured to the inner surface of the yokes 9 where the coils 7 are between the magnets 15 and inside the area effective by the magnets (see: figures 1 and 8). Takashima states, “an actuator having a coil **between yokes opposing to each other** via a specified space” (*emphasis added*, abstract). Figures 1 and 8 show the coil 7 directly under the magnet 15. Takashima does not teach or suggest a connection mold that is only formed on a non-effective portion that is an area outside of the magnets.

On page 3, the Examiner asserts that the alleged connection mold of Takashima is directly between the magnets and only in the effective portion. On pages 3 and 4, the Examiner

asserts that Takashima allegedly teaches an outer mold on the outside of the actuator, an inner mold 11 between the coils, and a connection mold 17. However, the "connection" mod 17 is formed between the magnets in the effective portion of the coil. Thus, Takashima does not teach or suggest a connection mold connecting the outer mold and the inner mold that is *only* formed on the non-effective portion of the coil.

CONCLUSION

In accordance with the foregoing, the Applicant respectfully submit that all outstanding rejections have been overcome and/or rendered moot, and further, that all pending claims patentably distinguish over the cited art. Thus, there being no further outstanding objections or rejections, the application is submitted as being in condition for allowance which action is earnestly solicited. At a minimum, the Board should enter this Amendment at least for purposes of Appeal as it either clarifies and/or narrows the issues for consideration.

If the Examiner has any remaining issues to be addressed, it is believed that prosecution can be expedited and possibly concluded by the Examiner contacting the undersigned attorney for a telephone interview to discuss any such remaining issues.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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